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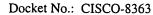
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TRANSMITTAL FORM			Application Number	10/679,203			
			Filing Date	October 2, 2003			
			First Named Inventor	Andrew Mark Gutman et al.			
(to be used for all correspondence after initial filing)			Art Unit	2152			
			Examiner Name	Unassigned			
Total Number of Page	s in This Submission	6	Attorney Docket Number	CISCO-8363			
ENCLOSURES (check all that apply)							
Fee Transmittal F	- Form	☐ Drawing(s)		After Allowance Communication to Group			
Fee Attached		Licensing-related Papers		Appeal Communication to Board of Appeals and Interferences			
Amendment / Re	ply	Petition		Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)			
After Final		Petition to Convert to a Provisional Application		Proprietary Information			
Affidavits/declaration(s)		Power of Attorney, Revocation Change of Correspondence Address		Status Letter			
Extension of Time Request		Terminal Disclaimer		Other Enclosure(s) (please identify below):			
Express Abandonment Request		Request for Refund  CD, Number of CD(s)		Request to Correct Filing Receipt; copy of Filing Receipt; copy of 1 <sup>st</sup> page of original patent 6,298,383.			
Certified Copy of Priority Document(s)		Rema	rks				
Response to Missing Parts/ Incomplete Application							
Response to Missing Parts under 37 CFR 1.52 or 1.53							
	SIGNA	TURE OF	APPLICANT, ATTORNEY, O	R AGENT			
Firm <i>or</i> Individual name	David B. Ritchie, Reg. No. 31,562 Thelen Reid & Priest LLP						
Signature							
Date 1-12-2004							
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APPLICANT:

Andrew Mark Gutman et al.

SERIAL NO.:

10/679,203

FILING DATE:

October 2, 2003

TITLE:

Integration of Authentication Authorization and Accounting Service and

Proxy Service

ART UNIT:

2152

**EXAMINER:** 

Unassigned

# **CERTIFICATE OF MAILING**

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# REQUEST TO CORRECT FILING RECEIPT

It is respectfully submitted that the Filing Receipt for the above-identified reissue patent application has an error. The title is spelled incorrectly; the correct spelling is "Integration of Authentication Authorization and Accounting Service and Proxy Service" and not "Integration of Authentication Authorization and Accounting Service Proxy Service" as indicated on the Filing Receipt. Please amend the Filing Receipt and appropriate records to reflect the correct title in the above referenced reissue patent application. A copy of the Filing Receipt is enclosed. In addition, also enclosed is a copy of original patent 6,298,383 which was filed with the reissue

Docket No.: CISCO-8363

patent application on October 2, 2003 for the above referenced patent application. Please note that it correctly lists the spelling of the title.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1698.

Respectfully submitted, THELEN REID & PRIEST LLP

Dated: January 12, 2004

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David B Ritchie Thelen Reid & Priest LLP PO Box 640640 San Jose, CA 95164-0640



**CONFIRMATION NO. 4568** 

**FILING RECEIPT** 

OC000000011463895\*

Date Mailed: 12/11/2003

Receipt is acknowledged of this reissue Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Andrew Mark Gutman, Foothill Ranch, CA; Aravind Sitaraman, Santa Clara, CA; Sampath Kumar Sthothra Bhasham, Santa Clara, CA; Kalpathi S. Suryanarayanan, Cupertino, CA;

# Domestic Priority data as claimed by applicant

This application is a REI of 09/225,247 01/04/1999 PAT 6,298,383

Foreign Applications

Projected Publication Date: None, application is not eligi	ible for pre-grant publication			
Non-Publication Request: No	Reviewed By:MPDate:1/9/04			
Early Publication Request: No	No Action Required: X THE			
Title	(and)			
Integration of authentication authorization a	Integration of authentication authorization and accounting service proxy service			

**Preliminary Class** 

CPI	DOC PRIED			
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Event	Data			

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# (12) United States Patent

Gutman et al.

# (10) Patent No.:

US 6,298,383 B1

(45) Date of Patent:

Oct. 2, 2001

#### (54) «INTEGRATION OF AUTHENTICATION AUTHORIZATION AND ACCOUNTING SERVICE AND PROXY SERVICE

(75) Inventors: Andrew Mark Gutman, Foothill

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(73) Assignee: Cisco Technology, Inc., San Jose, CA

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Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/225,247

Notice:

(22) Filed: Jan. 4, 1999

(56) References Cited

#### U.S. PATENT DOCUMENTS

4,763,191	8/1988	Gordon et al	358/86
4,922,486	5/1990	Lidinsky et al	370/60
4,962,497	10/1990	Ferenc et al 3	70/60.1

(List continued on next page.)

#### FOREIGN PATENT DOCUMENTS

0 567 217	10/1993	(EP)	H04L/12/46
99/53408	10/1999	(WO)	G06F/15/16

## OTHER PUBLICATIONS

Bellovin, Steven M., "Problem Areas for the IP Security Protocols", Jul. 22–25, 1996, Proceedings of the Sixth Usenix UNIX Security Symposium, San Jose, CA. Active Software, Inc., "Active Software's Integration System", printed from http://www.activesw.com/products/products.html, on Jul. 24, 1998.

Ascend Communications, Inc., "Access Control Product Information", 4 pages, Undated.

Ascend Communications, Inc., "Remote Access Network Security", printed from http://www.ascend.com/1103.html, on Jul. 24, 1998, pp. 1-8.

Ascend Communications, Inc., "MultiVPN from Ascend Communications: Breaking Down the Barriers to VPNs", White Paper, 1998.

Bracho, Dr. Rafael, "Integrating the Corporate Computing Environment with Active Software", Nov. 18, 1998, Active Software, pp. 1–17.

Bracho, Dr. Rafael, "Mastering Corporate Computing with the ActiveWeb System", 1996, Active Software, Inc.

(List continued on next page.)

Primary Examiner—Robert Harrell (74) Attorney, Agent, or Firm—Thelen Reid & Priest LLP; David B. Ritchie

#### (57) ABSTRACT

A single database maintained centrally hosts both proxy service data and authentication, authorization and accounting (AAA) data. Data is then copied to storage used locally by each system when both systems are instantiated. Therefore the ISP/Telco need not maintain two different data bases. A protocol gateway (PGW) is used to determine if the incoming user is a wholesale or retail user. The PGW filters the domain portion of the access request to locate a remote AAA service. If one such service is found, the PGW routes the communication via the proxy service to proxy it to the remote AAA service. The returned packet from the remote AAA service is then searched for an IP address to be assigned to the incoming user. If one is not found the PGW obtains a dynamically allocated IP address from a DHCP server (using an IP-Pool-ID if supplied in the returned packet from the remote AAA service). The same mechanism is used to forward accounting event packets from the NAS to the remote AAA server. The PGW may monitor more than one proxy and/or AAA service and load balance among them.

#### 30 Claims, 9 Drawing Sheets

